

REGULATORER

HBS 200-10-3.5



- Høytrykksregulator - Dual scenen
- Montering på 200 bar gass-sylinder - Høy presisjon av reguleringen
- Egnet for rene gasser og blandinger, ikke etsende
- Forkrommet messing

Laboratorier og analyse, laser

Domains of applications

Mindre trykksvingninger kan svekke strenge laboratorieanalyser. For å motvirke dette er HBS-serien utstyrt med et avansert to-trinns reduksjonssystem. Det andre trinnet benytter en belg-tetning i bronse, noe som garanterer maksimal nøyaktighet og feilfri, ekstrem presisjon i ditt arbeidstrykk.

Designed for implementation of:

Ikke-etsende rene gasser opp til N60 inkludert ALPHAGAZ™ 1 & 2, Ikke-korrosive gasser med konsentrasjon som er større enn 1 ppm

Specifications

Maximal inlet pressure at 15°C 200 bar
 Outlet Pressure..... 0,5 til 10 bar
 Nominal nitrogen flow 3.5 Nm³/h*
 Set pressure 16 bar

Tasso di fuga interno / esterno ≤ 3x10⁻⁷ mbar.l/s di elio., Driftstemperatur: -20 ° C til + 50 ° C.

*garantert ved maksimalt utløpstrykk P2 opp til et innløpstrykk P3 = 2P2 + 1 bar.

Materials

Body Forkrommet messing
 Seat Første etappe i PCTFE, Andre trinn i messing
 Main valve..... Første etappe i messing, Andre trinn i messing/EPDM
 Bellow 316 rustfritt stål
 Filter Monel® 400
 Pressure gauge Ø 50mm, Kobber legering mekanisme, Forsegle i PA 6.6

Relief valve Body i 303 rustfritt stål, Poppet i messing, Seal i EPDM

Monel® er et varemerke for Special Metals Corporation.

Highlights

- **Presisjon:** Leverer maksimal nøyaktighet og feilfri trykkstabilitet som kreves for svært sensitive kontroll- og analyselivsmiljøer i laboratorier.

- **Tostrinns reduksjonssystem:** Har en totrinns utforming for å maksimere nøyaktigheten. Det første trinnet bruker en svært slitesterk membran i rustfritt stål, mens det andre trinnet benytter en belgstetning i bronse for optimal presisjon.

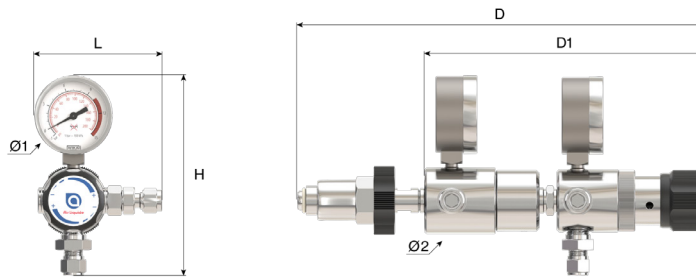
- **Konstruksjon:** Selve regulatorkroppen er konstruert i førsteklasses forkrommet messing, noe som sikrer langvarig holdbarhet og sikkerhet.

INFO +

2.1 Samsvarserklæring er tilgjengelig på forespørsel. Vennligst kontakt kundeserviceteamet eller produktledelsen før bestilling.

Dimensions

Length (L) : 90 mm
Height (H) : 129 mm
Depth (D) : 265 mm
Depth (D1) : 183 mm
Ø1 : 50 mm
Ø2 : 44 mm
Net weight : 1.22 kg



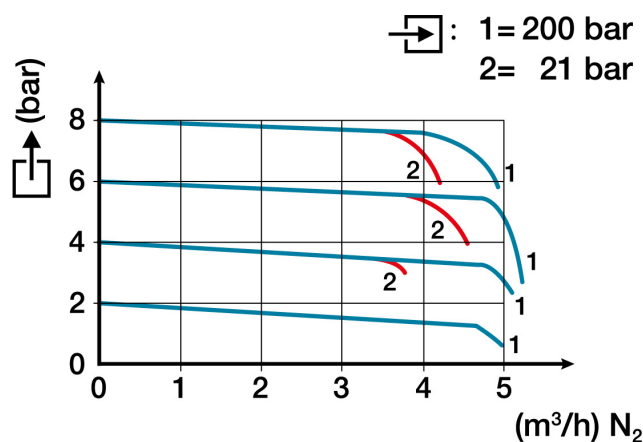
Operating instructions

OP 150 - HBS

Connection

Inlet connection: HP cylinder beslaget ifølge gass
Outlet connection: 2 utløpsporter G 3/8 BSPP hunn
Relief valve connection: Cr-messing Kompresjons montering 6mm, messing Ferrules

Flow curve







Products

Product Number	Short Designation	Gas	Inlet Pressure	Outlet Pressure	Flow	Inlet Fitting	Inlet Fitting Form	Outlet Fitting	Material
122940	REG HBS 200-10-3,5 DIN 14 - CF 6MM		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 14		CF 6mm	Messing
213330	REG HBS 200-10-3,5 DIN-9		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 9	Wrench Cr-Brass	G 3/8 BSPP kvinnelig	Messing
214091	REG HBS 200-10-3,5 DIN 9 - CF 1/8"		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 9	Wrench Cr-Brass	CF 1/8"	Messing
214092	REG HBS 200-10-3,5 DIN 9 - CF 6MM		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 9	Wrench Cr-Brass	G 3/8 BSPP kvinnelig	Messing
214093	REG HBS 200-10-3,5 DIN 9 - HN 4MM		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 9	Wrench Cr-Brass	HF 4 / 6mm	Messing
122935	REG HBS 200-10-3,5 DIN 1/B8 - CF 1/8"	H2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1		CF 1/8"	Messing
122936	REG HBS 200-10-3,5 DIN 1/B8 - CF 6MM	H2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1		CF 6mm	Messing
122937	REG HBS 200-10-3,5 DIN 1/B8 - HN 4MM	H2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1		HF 4 / 6mm	Messing
122927	REG HBS 200-10-3,5 DIN 10 - CF 1/8"	N2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 10		CF 1/8"	Messing
122928	REG HBS 200-10-3,5 DIN 10 - CF 6MM	N2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 10		CF 6mm	Messing
122929	REG HBS 200-10-3,5 DIN 10 - HN 4MM	N2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 10		HF 4 / 6mm	Messing
122947	REG HBS 200-10-3,5 DIN 11 - CF 1/8"	N2O	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 11		CF 1/8"	Messing
122948	REG HBS 200-10-3,5 DIN 11 - CF 6MM	N2O	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 11		CF 6mm	Messing

Product Number	Short Designation	Gas	Inlet Pressure	Outlet Pressure	Flow	Inlet Fitting	Inlet Fitting Form	Outlet Fitting	Material
122949	REG HBS 200-10-3,5 DIN 11 - HN 4MM	N2O	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 11		HF 4 / 6mm	Messing
122943	REG HBS 200-10-3,5 DIN 13 - CF 1/8"	Luft	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1. 3		CF 1/8"	Messing
122944	REG HBS 200-10-3,5 DIN 13 - CF 6MM	Luft	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1. 3		CF 6mm	Messing
122945	REG HBS 200-10-3,5 DIN 13 - HN 4MM	Luft	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1. 3		HF 4 / 6mm	Messing
122939	REG HBS 200-10-3,5 DIN 14 - CF 1/8"		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 14		CF 1/8"	Messing
122941	REG HBS 200-10-3,5 DIN 14 - HN 4MM		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 14		HF 4 / 6mm	Messing
122931	REG HBS 200-10-3,5 DIN 6/B5 - CF 1/8"	CO2, O2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 6	Wrench Cr-Brass	CF 1/8"	Messing
122932	REG HBS 200-10-3,5 DIN 6/B5 - CF 6MM	CO2, O2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 6	Wrench Cr-Brass	CF 6mm	Messing
122933	REG HBS 200-10-3,5 DIN 6/B5 - HN 4MM	CO2, O2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 6	Wrench Cr-Brass	HF 4 / 6mm	Messing
192192	REG HBS 200-10-3,5 DIN 10	Ar, He, inerte gasser, N2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 10	Wrench Cr-Brass	G 3/8 BSPP kvinnelig	Messing
191189	REG HBS 200-10-3,5 NF F	O2	200 bar	10 bar	3.5 Nm³/h	NF F		G 3/8 BSPP kvinnelig	Messing
191190	REG HBS 200-10-3,5 NF C	inerte gasser	200 bar	10 bar	3.5 Nm³/h	NF C		G 3/8 BSPP kvinnelig	Messing
193414	REG HBS 200-10-3,5 DIN 1	H2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1		G 3/8 BSPP kvinnelig	Messing
193417	REG HBS 200-10-3,5 DIN 11	N2O	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 11		G 3/8 BSPP kvinnelig	Messing
193416	REG HBS 200-10-3,5 DIN 13	Luft	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 1. 3		G 3/8 BSPP kvinnelig	Messing
193415	REG HBS 200-10-3,5 DIN 14		200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 14	Wrench Cr-Brass	G 3/8 BSPP kvinnelig	Messing
193413	REG HBS 200-10-3,5 DIN 6	CO2, O2	200 bar	10 bar	3.5 Nm³/h	DIN 477-1 Nr. 6	Wrench Cr-Brass	G 3/8 BSPP kvinnelig	Messing

Options

	Product Number	Long designation
	16516	CONNECTION G3/8 BSPP Male with Barb Hose for flexible pipe Ø Int. 4 to 6mm
	16521	CONNECTION G 3/8 BSPP Male - CF 1/8" - Brass-Cr
	16522	CONNECTION G 3/8" Male Compression Fitting 6 MM Brass Chrome GYROLOK
	16523	CONNECTION G 3/8 BSPP Male - CF 1/4" - Brass-Cr
	16524	CONNECTION G 3/8 BSPP Male - CF 10mm - Brass-Cr
	16526	Connection G3/8 BSPP M - CF 8MM BRASS-CR
	16532	Kit n°2 : CF 6mm + CF 1/8" + Barbed hose 6mm
	16558	Connection G3/8 BSPP M - CF 6MM SS
	16562	COMP. FITTING G3/8" 8 MM SS

	Product Number	Long designation
	16566	Connection G3/8 BSPP M - CF 1/8" SS
	16567	Connection G3/8 BSPP M - CF 10MM SS
	16569	Connection G3/8 BSPP M - CF 12MM SS
	19207	LEAK DETECTOR "1000 BULLES"
	19286	Connection G3/8 BSPP M NIP. Ø 8-10MM BR

Spare parts

Product Number	SP Number	Long designation
122940	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	29226	FLAT SEAL in PTCFE (Kel-F®) 16x9,2x2
213330	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
214091	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
214092	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
214093	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
122935	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	16014	Pressure gauge -1+4+6 Bar Ø 50mm vertical M10x1 Stainless steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	17203	FLAT SEAL in PTCFE 18x11,8x2 for inlet connection s.steel - DIN477-1/6/9/10 & NEN LU1
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122936	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	15986	Pressure gauge -1+8+12 Bar Ø 50mm Vertical M10x1 Stainless steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	17203	FLAT SEAL in PTCFE 18x11,8x2 for inlet connection s.steel - DIN477-1/6/9/10 & NEN LU1
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122937	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	15986	Pressure gauge -1+8+12 Bar Ø 50mm Vertical M10x1 Stainless steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	17203	FLAT SEAL in PTCFE 18x11,8x2 for inlet connection s.steel - DIN477-1/6/9/10 & NEN LU1
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)

Product Number	SP Number	Long designation
122927	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	16013	Pressure gauge -1+3+5 Bar Ø 50mm Vertical M10x1 Stainless steel
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122928	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	16020	Pressure gauge 0+30+40 Bar Ø 50mm Vertical M10x1 Stainless steel
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122929	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	16021	Pressure gauge 0+70+100 Bar Ø 50mm Vertical M10x1 Stainless steel
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122947	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29186	FLAT SEAL PA 6-6 14x9x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
	167800	KIT of Seals flat PA 6.6 for manometer M10x1 (2 seals 0,5 mm, 2 seals 1 mm, 2 seals 1,5 mm) 1 KIT = 6 seals
122948	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	18552	PRESSURE GAUGE 0-25 Bar Ø 50mm Vertical Entry G1/4 Brass-Cr - Body S.Steel
	29053	FLAT SEAL in PA 6.6 20x12x2
	29186	FLAT SEAL PA 6-6 14x9x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
	167800	KIT of Seals flat PA 6.6 for manometer M10x1 (2 seals 0,5 mm, 2 seals 1 mm, 2 seals 1,5 mm) 1 KIT = 6 seals
122949	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	16014	Pressure gauge -1+4+6 Bar Ø 50mm vertical M10x1 Stainless steel
	17141	Flat Seal PTCFE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29186	FLAT SEAL PA 6-6 14x9x2
	122943	15979

Product Number	SP Number	Long designation
122943	16014	Pressure gauge -1+4+6 Bar Ø 50mm vertical M10x1 Stainless steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122944	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	15986	Pressure gauge -1+8+12 Bar Ø 50mm Vertical M10x1 Stainless steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122945	15979	Pressure gauge 0-200+315 Bar Ø 50mm vertical M10x1 Stainless steel
	15986	Pressure gauge -1+8+12 Bar Ø 50mm Vertical M10x1 Stainless steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
122939	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29226	FLAT SEAL in PTFCE (Kel-F®) 16x9,2x2
	167800	KIT of Seals flat PA 6.6 for manometer M10x1 (2 seals 0,5 mm, 2 seals 1 mm, 2 seals 1,5 mm) 1 KIT = 6 seals
122941	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	29226	FLAT SEAL in PTFCE (Kel-F®) 16x9,2x2
	167800	KIT of Seals flat PA 6.6 for manometer M10x1 (2 seals 0,5 mm, 2 seals 1 mm, 2 seals 1,5 mm) 1 KIT = 6 seals
122931	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
122932	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
122933	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2

Product Number	SP Number	Long designation
192192	16001	Manometer -1 + 8 + 12 bar Ø50 vertikal M10x1
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29053	FLAT SEAL in PA 6.6 20x12x2
	167800	KIT of Seals flat PA 6.6 for manometer M10x1 (2 seals 0,5 mm, 2 seals 1 mm, 2 seals 1,5 mm) 1 KIT = 6 seals
191189	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
191190	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	16000	TRYKKMÅLER (-1) - 1,5 Bar Ø 50 mm Vertikal inngang M10x1 messing
	17130	O-RING in EPDM R9 10,5x2,7 mm EP851 for inlet connection brass - type C/B4 & E(NF)
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
193414	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	17203	FLAT SEAL in PTFCE 18x11,8x2 for inlet connection s.steel - DIN477-1/6/9/10 & NEN LU1
193417	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29186	FLAT SEAL PA 6-6 14x9x2
193416	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29187	PACKNING 18X11,8X2 MM NYLON (Bag of 10)
193415	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2
	29226	FLAT SEAL in PTFCE (Kel-F®) 16x9,2x2
193413	15969	PRESSURE GAUGE 0- 200/315 Bar Ø 50mm Vertical Entry M10x1 Brass-Cr - Body S.Steel
	17141	Flat Seal PTFCE (KEL-F®) 14,5X10X2